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Timed oral reading tests may not reflect true reading abilities in school-age children who stutter

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Abstract

The American Speech-Language-Hearing Association's (ASHA) Ad Hoc Committee on Reading Fluency for School-Age Children who Stutter surveyed ASHA members working with children who stutter to determine common practice for assessing oral reading fluency. Qualitative results revealed a non-standardized process of assessment procedures and interpretations that may have negative educational consequences for children who stutter.

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1. Introduction

Reading is the one of the most valuable academic skills a school-age child can acquire. Long-term reading outcomes such as comprehension require early mastery of basic reading skills: phonemic awareness, decoding, and oral reading fluency. The complexities of oral reading fluency involve intricate motor and cognitive coordination within a rapid time frame. In order to achieve the instantaneous and seemingly smooth act of oral reading, the basic components of reading must be executed automatically with minimal conscious awareness (Logan, 1997). When enough reading components are processed rapidly, the reader is freed to focus attention reserves on processes such as comprehension of text. It is not surprising, then, that reading scientists have focused their attention on utilizing speed at which text is read as a key measure of skillful reading. Oral reading fluency scores can be indexed as words read correctly per minute, so that incremental differences can be tracked over time to monitor progress of reading skills (Fuchs et al., 2001).

Students are frequently tested at school to measure their reading progress, as achievement of early reading skills is deemed essential to the development of later reading proficiency. Educators use reading assessment data to determine student needs and to make reading intervention decisions. For example, if the student does not meet the one-minute oral fluency target, he/she is at risk of being recommended for various levels of interventions including further testing and/or receiving instructional support in smaller groups (Diamond, 2005).

For many students who stutter, however, lack of oral reading fluency can be wrongly attributed to poor reading skills. Fluency breakdowns during stuttering moments (e.g., repetitions, substitutions, hesitations) will inevitably impact oral reading rate. There are legitimate concerns that students who stutter may not be receiving necessary accommodations during time-limited reading tests. Children who stutter (CWS) might experience challenges on time-limited tests due to the presence of blocks, repetitions, prolongations, slower-than-normal speech rate and speech breakdowns from reading or speaking under pressure (Scaler Scott, 2010). Many of the standardized oral reading fluency tests are timed measures and most do not allow time adjustments for school-age students with speech fluency problems. Testing procedures and accommodations remain unclear when assessing reading progress in students who stutter, leading to possible misdiagnosis, inaccuracy, and misjudgement of full potential of reading skills. Such errors have the potential to lead to negative communication attitudes and communication avoidance in CWS. Although negative attitudes and communication avoidance has been documented in CWS (see Murphy, Yaruss, & Quesal, 2007 for review), no studies to date have examined the potential negative impact of measures of oral reading fluency on CWS.

1.1. Examining oral reading fluency measures for children who stutter

Given the concerns that students who stutter may not be receiving necessary accommodations during reading tests that have oral reading rate as an integral component of the assessment, the American Speech-Language-Hearing Association (ASHA) established the Committee on Reading Fluency for School-Age Children Who Stutter. The committee's first task was to further investigate the current status of oral reading fluency testing and existing accommodations during such testing for CWS. The purpose of this investigation was to determine: 1) the type of tests that are being administered to measure oral reading fluency in the USA and; 2) the type of accommodations that are being implemented across school districts in the United States of America (USA) during the administration of oral reading fluency to students who stutter. The committee developed and fielded a survey for speech-language therapists (SLTs) to investigate the oral reading fluency testing and accommodations process. Quantitative results of this study are published elsewhere (Games, Paul, Reeves, in press). The purpose of the current study is to outline qualitative themes obtained from commentary provided by SLTs completing the surveys.

2. Study Design

2.1 Participants and data collection

As outlined in Games, Paul, and Reeves (in press), an email invitation to participate in the survey was sent to 12, 229 ASHA-certified SLTs residing in the United States and employed full- or part-time. The invitations were sent to those who either indicated that they provided clinical services in a school setting in some capacity; “fluency” was an area of expertise for them; and/or those who belonged to special interest groups on Fluency and Fluency Disorders and Language Learning and Education. Response rate was 2.0%.

2.2 Data analysis

The Committee reviewed the qualitative results of the survey to determine current practices of reading assessment in schools, appropriateness of testing tools, and barriers to adequate testing. Qualitative analysis followed the recommendations of Smith and Osborn (2003) for Interpretive Phenomenological Analysis (IPA). Procedures included reading of all written feedback by multiple coders, culling written feedback for relevant themes, identifying and clustering emerging themes, triangulation among coders, and member checking.

3. Findings

Themes and subthemes are detailed below. Bullet points in italics below themes and subthemes reflect examples of respondent comments from which themes and subthemes emerged.

Theme One:

An emerging theme about current status is that the process for testing oral reading fluency in students who stutter is not standardized. The process is variable within and across school districts and decisions regarding test accommodations are made on a case-by-case basis.

Subtheme One: Accommodations made if noted in Individualized Education Program (IEP)

- *My student who stutters has accommodations listed on his IEP.*
- *[How I respond] depends upon accommodations in the IEP or 504 plan.*
- *Usually no exception is made unless child is on IEP and accommodation noted on IEP and administrator reminded of this.*

Subtheme Two: Accommodations made by clinician judgment of impact of stuttering on oral reading fluency

- *As [my student's] case manager, it is my responsibility to make sure his classroom teacher understands his stuttering behaviors and how they can affect his reading fluency. If need be, I will complete the reading assessment or help with interpretation of the results.*
- *When I have students on an IEP with fluency goals, I urge teachers to avoid working on reading fluency and work on comprehension strategies instead.*

Theme Two:

Speech-language therapists indicated that school professionals need more information about how to accurately measure reading fluency in students who stutter, and that specific barriers prevent the information from being disseminated.

- *An area that should continue to be monitored.*
- *I am glad that you are addressing this issue.*

- *I am glad that this issue is continuing to be investigated.*
- *I appreciate your bringing this up, because there should be accommodations and I will be pursuing adding them to the IEP.*

4. Clinical implications and conclusions

Overall, SLTs and other professionals within the school setting working with students who stutter require more guidance about how disorders of speech fluency can negatively impact assessment of oral reading fluency rate. In addition to information regarding the potential negative impact of speech fluency disorders upon oral reading fluency assessment, school professionals require guidance as to how to best accommodate these students to obtain a valid measure of their oral reading fluency. Being placed in an inappropriate reading group, failing to promote to the next grade, or being provided with unnecessary reading instruction due to inaccurate assessment of oral reading fluency can have a negative effect upon a student with a fluency disorder. These negative impacts may lead to avoidance of communication and reading tasks. To mitigate these negative consequences, the SLTs should work within a team to educate relevant professionals and support students with fluency disorders. This area requires further investigation and education of all school personnel involved in oral reading fluency assessment.

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ASHA Ad Hoc Committee on Reading Fluency for School-Age Children Who Stutter

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SIG 4 Coordinating Committee Project Team on Reading Fluency

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References

- Fuchs, L. S., Fuchs, D., and Hosp, M. K. (2001). *Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical Analysis. Scientific Studies of Reading, 5(3), 239-256.* From <http://www.specialistedpsy.com/fuchsetalreadfluency.pdf-link.pdf>
- Games, D., Paul, D., & Reeves, N. (in press). Oral Reading Fluency Measures and Accommodations for School-Age Students Who Stutter. Article accepted for publication in *Perspectives on Fluency and Fluency Disorders*.
- Good, R. H., & Kaminski, A. (Eds.). (2002). *Dynamic Indicators of Basic Early Literacy Skills-6th Ed (DIBELS)*. Eugene, OR: Institute for the Development of Educational Achievement. Available from dibels.uoregon.edu
- Diamond, L. (2005). *Assessment-Driven Instruction: A Systems Approach*. Perspectives, Fall 2005, The International Dyslexia Association, 33. From https://www.corelearn.com/files/PerspectivesFall202005_WEB.pdf
- Logan, G. D. (1997). Automaticity and reading: Perspectives from the instance theory of automatization. *Reading*

and Writing Quarterly, 13, 123–146.

- Murphy, W. P., Yaruss, J. S., & Quesal, R. W. (2007). Enhancing treatment for school-age children who stutter. I. Reducing negative reactions through desensitization and cognitive restructuring. *Journal of Fluency Disorders*, 32, 121-138.
- National Reading Panel Publications. (2000, April). *Fluency. Chapter 3*. U. S. Department of Human Services. Public Health Services. National Institute of Child Health and Human Development. NIH Pub. No. 00- 4754.
- Pikulski, J. J., & Chard, D. J. (2003). Fluency: The bridge from decoding to reading comprehension. *Current research in reading/language arts*. New York, NY: Houghton Mifflin Reading.
- Scaler Scott, K. (2010). *Stuttering and Reading Fluency: Information for Teachers*. [Brochure]. New York: National Stuttering Association.
- Smith, J. A., & Osborn, M. (2003). Interpretative phenomenological analysis. In J. A. Smith (Ed.) *Qualitative psychology: A practical guide to research methods* (pp. 51-80). London: Sage.
- Torgesen, J., Wagner, R., & Rashotte, C. (1999). *Test of Word Reading Efficiency*. Pittsburgh, PA: Mayer-Johnson.
- Wiederholt, J. R., & Bryant, B. R. (2001). *Gray Oral Reading Test*. Pittsburgh, PA: Mayer-Johnson.
- Woodcock, R. (1987). *Woodcock Reading Mastery Tests-Revised*. San Antonio, TX: Pearson.